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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,278	09/09/2003	Jun-Hyuk Lee	P56854	1391

7590 07/13/2005

Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005-1202

EXAMINER

FRAZIER, OWEN J

ART UNIT	PAPER NUMBER
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2687

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/657,278		LEE ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Owen J. Frazier		2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/9/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 1 [130]. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by McIntosh (US 2003/0139180).

Regarding claim 1, McIntosh teaches in figures 1 and 2 a base station (168) for assigning an ID which reads on UATI to each terminal of the public and private wireless networks to provide services of the high-speed wireless data system; a base station controller (162) for performing authentications, assignment of ID, management of session, and control of data; a private authentication system (radius server 212) with a database for authenticating the terminal to the private wireless network (120) ([0038], [0067], [0068], [0077], [0092]); a data location register (144 and 156) having service information of the public wireless network terminal (112) and information for receiving services from the private network; and a hub (NIB 124) for intermediating data between base station (168) and base station controller (162) and the private authentication system (212) and discriminate between private and public wireless network services by means of ID received by the terminal ([0052], [0055], [0060], [0065], [0067], [0068], [0073]).

Regarding claim 2, McIntosh teaches the base station and base station controller assign an IP address for performing an IP telecommunication and process data and signaling for the assigned address ([0063], [0065], [0073]).

Regarding claim 3, McIntosh teaches a data service node connected to the hub to provide data services only to the terminal of the private wireless network (figure 2 128).

Regarding claim 4, McIntosh teaches the data location register storing terminal information of both the private and the public network and assigns an ID for the private network to the terminal when the terminal is in range of a predetermined base station ([0062], [0063], [0067], [0068], [0069], [0071]).

Regarding claim 5, McIntosh teaches the data location register assigns the ID of the private network to a corresponding terminal when the terminal is location within a predetermined base station in a predetermined time zone ([0062], [0064]).

Regarding claim 6, McIntosh teaches the hub (NIB) discriminates between private network services and public network services by means of the ID received from the terminals in connecting a call ([0052], [0055], [0060], [0065], [0067], [0068], [0073], [0077]).

Regarding claim 7, McIntosh teaches when performing a call out, the hub (NIB) originates a call through another hub belonging to the public wireless network ([0065], [0066], [0077], [0081]).

Regarding claim 8, McIntosh teaches the private authentication system further has a data base for authentication of the terminal of the public network ([0061]).

Regarding claim 9, McIntosh teaches a predetermined terminal (figure 2 130 or 112) demands a call out through a base station (168), the hub checking and ID and a destination address received from the terminal to determine whether private network

services are required; when private network services are required, the hub connecting a call to the base station and the base station controller; the base station controller checking through a private authentication system (212) whether the terminal has been authenticated; and when the terminal has been authenticated, the base station controller directing the call to the requested destination address to perform communication ([0062], [0069], [0068], [0071], [0075]).

Regarding claim 10, McIntosh teaches recording a location of the terminal upon completion of the communication ([0062]).

Regarding claim 11, McIntosh teaches determining whether private network services are required, private network services are required when the destination address received from the terminal is an address belonging to a private network ([0063]).

Regarding claim 12, McIntosh teaches the ID of the terminal demanding the call out enables determination of whether the terminal belongs to the private or the public network ([0068], [0069]).

Regarding claim 13, McIntosh teaches the hub performing a process for providing public services when the public services are required as a result of checking the ID and destination address of the terminal ([0069], [0071], [0075]).

Regarding claim 14, McIntosh teaches the hub transmitting the ID and destination address of the terminal demanding the call out to another hub of the public network for public network services when public network services are required ([0065], [0066], [0077], [0081]).

Regarding claim 15, McIntosh teaches in figure 2 when a call connection is required to a predetermined terminal from a predetermined packet data service node, the base station controller (162) demanding a paging to the location register (156 or 144 or 216 [0062], [0063]); the location register providing a response signal and a paging signal to a corresponding base station controller (162) where the terminal is located; the base station controller (162) performing the paging to the terminal; when the paging response signal is received from the terminal, authenticating the terminal by the authentication system (212) ([0038], [0067], [0068], [0077], [0092]); and performing communication between the terminal and the packet data service node upon completion of the authentication (figure 2 128).

Regarding claim 16, McIntosh teaches the recording a location of the terminal upon completion of the communication ([0062]).

Regarding claim 17, McIntosh teaches in figures 1 and 2 a terminal (130) capable of using either the public or the private network, the terminal using a public network ID in originating and terminating a call by means of public network services, and using a private network ID in originating and terminating a call by means of private network services; a base station (168) providing high-speed data service through a wireless channel to the terminal, the base station assigning IDs of the public and private network when the terminal is within a predetermined area and assigning the ID of the public network when the terminal is outside the predetermined area ([0062], [0064]); a base station controller (162) for performing authentications, assignment of ID of either

private or public network according to the information about each terminal, management of session, and control of data; a private authentication system (radius server 212) with a database for authenticating the terminal to the private wireless network (120) ([0038], [0067], [0068], [0077], [0092]); a data location register (144 and 156, 216) having service information of the public wireless network terminal (112) and information for receiving services from the private network; and a hub (NIB 124) for intermediating data between base station (168) and base station controller (162) and the private authentication system (212) and discriminate between private and public wireless network services by means of ID received by the terminal ([0052], [0055], [0060], [0065], [0067], [0068], [0073]).

Regarding claim 18, McIntosh teaches when the terminal demands the ID of the public network the hub connects the terminal to another hub of the public network so that the ID can be assigned to the terminal ([0065], [0066], [0077], [0081]).

Regarding claim 19, McIntosh teaches when the terminal demands the ID fo the public network, the base station controller assigns the ID of the public network through the hub to the terminal ([0069], [0071], [0075]).

Regarding claim 20, McIntosh teaches when the terminal demands service of the public network the hub routes the call to another hub of the public network ([0065], [0066], [0077], ([0069], [0071], [0075], [0081]).

Regarding claim 21, McIntosh teaches a data service node connected to the hub to provide data services for terminals of the private network only (figure 2 128).



Regarding claim 22, McIntosh teaches the base station and base station controller assign an IP address for performing an IP telecommunication and process data and signaling for the assigned address ([0063], [0065], [0073]).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McIntosh (US 6,535,732), Kim (US 2002/0022497), Lee (US 2001/0046860), Kang (US 2001/0046214).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Owen J. Frazier whose telephone number is (571) 272-7921. The examiner can normally be reached on Monday-Friday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OJF 7/8/2005

  
7/11/05  
LESTER G. KINCAID  
PRIMARY EXAMINER